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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/965,140	09/26/2001	Jerome L. Elkind	TI-33085	6252
23494	7590	05/06/2004	EXAMINER	
TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265			SIEFKE, SAMUEL P	
			ART UNIT	PAPER NUMBER

1743

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/965,140

Applicant(s)

ELKIND, JEROME L.

Examiner

Samuel P Siefke

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on restriction requirement.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 1-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-18, 20-24, 26-28, 32 and 36-41 is/are rejected.
- 7) ☐ Claim(s) 19, 25, 29-31 and 33-35 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-7, drawn to a portable analyzer, classified in class 204, subclass 403.02.
- II. Claims 8-13, drawn to a portable analyzer, classified in class 366, subclass 110.
- III. Claims 14-41, drawn to a portable analyzer, classified in class 422, subclass 68.1.

The inventions are distinct, each from the other because of the following reasons:

Inventions Group II and Group I are related as combination and subcombination.

Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because a permanent mount can be used for vibrating a biosensor instead of using a socket. The subcombination has separate utility such as a quick way of agitating a sample that is separate from a housing, a vortex mixer for example.

Inventions Group II and Group III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as

claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the biosensor is being vibrated and could be used to agitate a sample that is in a well, just by lowering the biosensor into the well and agitating. The subcombination has separate utility such as agitating multiple samples at once.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Jay Contor on 4/29/04 a provisional election was made with traverse to prosecute the invention of Group III, claims 14-41. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-13 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### ***Response to Arguments***

Applicant's arguments, see DECLARATION UNDER 37 C.F.R. 1.131, filed 02/09/04, with respect to the rejection(s) of claims 1-41 under 35 U.S.C. 102(e) Kuo (U.S. 2003/002318) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Yalvac et al. (USPN 5,310,526).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims **14-18,20-24,26-28,32,36** are rejected under 35 U.S.C. 102(b) as being anticipated by Yalvac et al. (USPN 5,310,526).

Yalvac discloses a chemical sensor that comprises cavity defined by two openings where two porous plugs seal (col. 1, lines 54-67) the openings to create a cavity (fig.1 ref. 13). A pressurized sample is flowed through one porous plug in the cavity while a pressurized reagent is flowed through the other porous plug into the cavity. A component of interest of the sample reacts with a reactive component of the reagent in the cavity to produce a reaction product. The reaction product is then analyzed in the cavity by, for example, absorption spectroscopy (optical based, col. 3, line 55- col. 4, line 37)). An ultra sonic vibrator (fig. 1 ref. 24; col. 3, lines 31-42) is attached to the body to enhance mixing of the reagent and sample in the cavity.

Claims **20** is rejected under 35 U.S.C. 102(b) as being anticipated by Kawana et al. (USPN 4,956,149).

Kawana discloses a biosensor device the comprises an elastic substrate, a sensor tip and a piezoelectric actuator. The sensor tip is mounted on one end of the

substrate. When the actuator is turned on, the biosensor agitates a sample and reagent to further mixing (col. 1, line 52- col. 2, line 39).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim **37-41** is rejected under 35 U.S.C. 103(a) as being unpatentable over Yalvac et al. (USPN 5,310,526) in view of Sunshine (USPN 6,085,576).

Yalvac discloses a chemical sensor as can be seen above.

Yalvac does not teach a data processing device a data input device an algorithmic software directing the data processing device, a wireless communications link, a transmitter.

Sunshine teaches a handheld sensing apparatus that comprises a processor having a data input device, a keypad for entering data, an algorithmic software that directs the data processing device, communication links and a transmitter (col. 13, lines 32-col. 15, line 29). It would have been obvious to one having an ordinary skill in the art to modify Yalvac to incorporate a data processor for analyzing data collected in order to be able to analyze more samples and store data on a backup system. It would have been obvious to modify Yalvac to incorporate a data transferring device like that of

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Sunshine to transmit data through wireless communication to data stations to keep real time monitoring of in line systems.

***Allowable Subject Matter***

Claims **19, 25, 29, 30, 31, 33, 34, 35** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. These claims would be allowable because the prior art does not teach or fairly suggest using a sealing means as suggest by the above claims nor does the prior art teach embedding a secondary reagent in the sample chamber or sealing element.

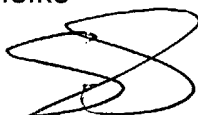
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel P Siefke whose telephone number is 571-272-1262. The examiner can normally be reached on M-F 7:00am-5:00pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on 571-272-1700. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sam P. Siefke



May 3, 2004



Jill Warden  
Supervisory Patent Examiner  
Technology Center 1700